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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/658,814 | 09/08/2003 | Kevin J. Surace | M-15249US | 2870 |
| 7590 | 03/18/2005 | | EXAMINER | |
| Alan H. MacPherson MacPHERSON KWOK CHEN & HEID LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110 | | | NGUYEN, CHI Q | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3635 | |

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | |
|-----------------|------------|--|
| Application No. | 10/658,814 | |
| Examiner | Art Unit | |

Chi Q Nguyen 3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15,24-26,40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 and 27-39 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-15,24-26,40 and 41 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121.

- I. Claims 1-15, 24-26, and 40-41 drawn to apparatus of a laminated panel, classified in class 52, subclass 787.11.
- II. Claims 16-23, and 27-39, drawn to a method of forming a laminated structure, classified in class 29.

The inventions I and II are related as process of making and product made. The inventions are distinct if either of the following can be shown:

- (1) that the process as claimed can be used to make other and materially different product or
- (2) that the product as claimed can be made by another and materially different process.

For instant case, the apparatus claims could be made by a method different than that group I such as casting an unity panel having sound blocking material, cement-asbestos, etc.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purpose as indicated is proper.

A telephone call was made to Mr. Alan MacPherson request an oral election on 2/23/05, and the election was made to group I (claims 1-15, 24-26, and 40-41) without traverse. Thus claims 16-23, and 27-39 are non-elected claims and will not treated on the merits.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the at least one external layer comprises a plurality of layers of selected materials such as a first layer of

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metal, a second layer of viscoelastic glue, and a third layer of gypsum must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 2-6, and 8-15, 24-26 are objected to because of the following informalities: the preamble of independent claims 1 and 7 cited as "A laminar structure..." and the dependent claim preambles 2-6, 8-15, and 24-26 cited as "Structure..." are inconsistent to their independent claims 1 and 7. They should be read as "The laminar structure..." Appropriate correction is required.

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Claim 15 is objected to because of there is no dependency for this claim. It is not clear what claim would claim 15 dependent upon. According, claim 15 is treated as depending on claim 1.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14, 15, and 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 40 is rejected under 35 U.S.C. 102(b) as being anticipated by Kirschner (US 3,215,225).

In regard claim 40, Kirschner teaches a laminated structure comprising a layer of first material 12 having two surfaces, a core layer 13. Since the core layer 13 is cemented as by rubber cement or the like to layer 12 and to lower metal sheet 11(col. 4, lines 14-15); thus the rubber cement serve as viscoelastic glue because it inherently

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having elastic and adhesive characteristic and on one surface of the layer of first material, and the core layer 13 serves as a second material 11 over the viscoelastic glue (see fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nudo (US 2004/0177590) in view of Kirschner (US 3,215,225).

In regard claims 1, 7, 8, 15, 26, Nudo teaches a laminar structure comprising two external layers of a material 22, at least one internal constraining layer 16 is made out of plastic, and two or more internal layer 16, and two or more internal layers of glue 20 separated by said at least one internal constraining layer 16. Nudo does not teach specifically the glue layers 20 are viscoelastic. Kirschner teaches a laminated structure comprising two external layers of material 10, 11, a constraining layer 12; a core layer 13 is cemented as by rubber cement or the like to layer 12, thus the rubber cement layer serves as a viscoelastic layer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Nudo with Kirschner for the viscoelastic layer. The motivation for doing so would have been to provide a better absorption of sound for the building panel.

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In regard claims 2, 5, 6, 13-14, 24-25, Nudo and Kirschner teach the claimed invention except for the constraining layer 16 is made out of sheet metal, galvanized steel, wood, etc. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the constraining layer is a sheet of galvanized steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice because the galvanized steel or wood would provide more integrity than plastic.

In regard claims 3, 4, 9, Nudo and Kirschner teach the claimed invention except for the two external layers comprise each a selected thickness gypsum board layer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have each of the external layers is gypsum board layer, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice because the gypsum board is the most common uses for the wall building panels.

In regard claims 10-12, Nudo and Kirschner teach the claimed invention except for the at least one external layer comprises a plurality of layers of a first layer of metal, a second layer of viscoelastic glue, a third layer of gypsum. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have one more laminated structure for the external layer comprising a first layer of metal, a second layer of viscoelastic glue, a third of gypsum, since it has been held that mere duplication of the essential parts of a device involves only routine skill in the art. The

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motivation for doing so would have been to provide a thicker laminated panel structure thus enhance more sound absorption.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kirschner.

In regard claim 41, Kirschner teaches the claimed invention as stated. And wherein the second material 11 is thinner than the first material layer 12 (as shown in fig. 1); However, Kirschner does not specifically teach the layer of second material falls in the range of 1/10-1/2 of the first material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a first layer is thicker than a second layer, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. The motivation for doing would have been to maximize to the sound absorption on the first layer.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Munir, Sellers, Haines, Pike, Jamison, Hartman and Juriga teach laminated structure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Chi Q. Nguyen whose telephone number is (703) 605-1224, Mon-Thu (7:00-5:30), Fridays off or examiner's supervisor, Carl Friedman can be reached at (703) 308-0839. The fax number for the organization where this application or proceeding assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

1143.

OK
CQN

3/2/05



**BRIAN E. GLESSNER
PRIMARY EXAMINER**